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Effectiveness of Technical-Vocational Training Programs on Livelihood Opportunities of Out-of-School Youth in Lingayen, Pangasinan, Philippines

Randy F. Soriano, PhD, Jessa Mae V. Caburnay, Laurence R. Abalos, Vanessa C. Lorenzo
Pangasinan State University, Lingayen Campus
Lingayen, Pangasinan, Philippines

Abstract - *This study was conducted to assess the effectiveness of vocational training programs in enhancing the livelihood opportunities of out-of-school youth in Lingayen, Pangasinan. Specifically, it examined the demographic profile of the respondents, the level of effectiveness of vocational training in terms of relevance to employment, confidence and readiness for employment, practical application and hands-on experience, and awareness of job opportunities. It also aimed to identify the challenges encountered in participating in such programs and determine the significant relationship between the respondents' profile and the perceived effectiveness of vocational training. The research employed a descriptive-correlational design using a survey questionnaire distributed to 67 out-of-school youth through convenience sampling. Data were analyzed using frequency, percentage, weighted mean, and Pearson Chi-Square test. Findings revealed that vocational training programs are perceived to be highly effective across the four aspects. Further the challenges encountered were rated as slightly challenging. Moreover, researchers determined that there is no significant relationship between the demographic profiles of out-of-school and the perceived effectiveness of vocational training programs on their job opportunities. Based on the findings, it recommends that training programs should tailor to the specific characteristics of out-of-school youth in Lingayen, Pangasinan, Philippines.*

Keywords – *Out-of-School Youth, Livelihood, Vocational, Training Programs, Lingayen, Pangasinan Philippines*

INTRODUCTION

Education is a basic human right and a key factor in societal advancement; however, many adolescents and school-aged youth, particularly in low- and middle-income countries, still face barriers to access. Despite global efforts, the rate of out-of-school youth has seen slight improvement over the past decade, highlighting the urgency of analyzing geographic disparities in school accessibility and attendance to address educational inequality (Alegana, V. A., Pezzulo, C., Tatem, A. J., Omar, B., & Christensen, A. 2021).

In Asian countries like the Philippines, the growing population of out-of-school youth (OSY) remains a pressing issue, including in communities such as Lingayen, Pangasinan. Although the government provides free basic education, many Filipino youths are unable to complete their schooling due to socioeconomic challenges such as poverty, family responsibilities, early employment, teenage pregnancy, and limited access to educational facilities.

Such circumstances often leave OSY with few employment opportunities. This reinforcers cycles of poverty and social exclusion. In response to this issue, Technical-Vocational Education and Training (TVET) programs mainly facilitated by the Technical Education and Skills Development Authority (TESDA) offer an alternative learning pathway. These programs aim to provide practical, hands-on training in fields such as welding, caregiving, and food and beverage services, equipping OSY with the competencies necessary for employment or entrepreneurship. However, the effectiveness of these programs in improving livelihood outcomes for out-of-school youth (OSY) has yet to be fully assessed.

Further, this study seeks to evaluate the effectiveness of vocational training programs in enhancing the livelihood opportunities of out-of-school youth in Lingayen, Pangasinan, Philippines. It aims to analyze the relevance of the training to employment, the confidence and readiness it builds among youth, the practical application of acquired skills, and the awareness it fosters regarding job opportunities. Additionally, the study outlines the challenges faced by out-of-school youth (OSY) in accessing these programs and recommends interventions to enhance their reach and impact.

OBJECTIVES OF THE STUDY

This study evaluated the effectiveness of vocational training programs in enhancing the livelihood opportunities of out-of-school youth in Lingayen,

Pangasinan, Philippines. Primarily, it sought to attain the following objectives.

1. To determine the demographic profile of out-of-school youth in Lingayen, Pangasinan, the study examined participants' of vocational training programs by age, sex, last grade level attended, type of course, parents' education, duration as OSY, and number of vocational training attended.
2. To assess the level of effectiveness of vocational training programs on the job opportunities of out-of-school youth in terms of relevance of training to employment opportunities, confidence and readiness for employment, practical application and hands-on experience, and awareness of job opportunities and career pathways.
3. To identify the challenges encountered by out-of-school youth in participating in vocational training programs conducted by Technical-Vocational Education and Training (TVET) providers in terms of access to information, financial barriers, and personal and social challenges.
4. To determine if there is a significant relationship between the demographic profile of out-of-school youth and the perceived effectiveness of vocational training programs on their job opportunities.
5. To propose possible interventions to strengthen vocational training programs for out-of-school youth in Lingayen, Pangasinan, Philippines.

MATERIALS AND METHOD

The researchers employed the descriptive survey technique to gather information on the effectiveness of vocational training programs and their impact on the livelihood opportunities of out-of-school youth in Lingayen, Pangasinan, Philippines. This method aimed to assess the relevance of the training programs, the challenges participants faced, and the impact of the training on their employment readiness and opportunities.

The respondents of the study were out-of-school youth who had completed technical-vocational training programs in Lingayen, Pangasinan, Philippines. From 129 individuals, only 67 responded to the survey, likely due to reluctance to participate. The researchers used convenience sampling to select the respondents, which involved identifying participants who were accessible and willing to participate in the study. Coordination with the Technical Education and Skills Development Authority (TESDA) and the Local Government Unit (LGU) of Lingayen helped the researchers identify qualified participants.

The primary data-gathering tool was a structured survey questionnaire. It consisted of three parts. Part I focused on the demographic profile of the respondents, including age, sex, last grade level attended, type of vocational course attended, parents' educational attainment, number of years as out-of-school youth, and number of vocational training attended. Part II evaluated vocational training programs using four components: employment relevance, work readiness, practical experience, and job opportunity awareness. ,Part III examined the challenges encountered by the respondents in accessing vocational training programs, categorized into access to information, financial barriers, and personal or social difficulties.

Before the data collection, the researchers sought approval from relevant authorities. Once approved, the researchers submitted a formal request to TESDA and the LGU to identify eligible respondents. The researchers distributed printed copies of the questionnaire. Ethical considerations, such as voluntary participation, informed consent, and confidentiality, were strictly observed throughout the process.

The data collected were tallied, organized, and analyzed using appropriate statistical tools. These included frequency, percentage, weighted mean, and Pearson Chi-Square test to interpret the respondents' profiles, the effectiveness of vocational training programs, the challenges encountered and the significant relationship between the demographic profile of out-of-school youth and the perceived effectiveness of vocational training programs on their job opportunities. The researchers arranged the presentation of results in tabular form to allow clear interpretation of findings.

RESULTS AND DISCUSSION

I. Demographic Profile of the Respondents

The first part presents the demographic profile of the selected out-of-school youth in Lingayen, Pangasinan, Philippines. The gathered data include their age, sex, last grade level attended, type of vocational course attended, parents' educational attainment, number of years as out-of-school youth, and number of vocational trainings attended.

Table 1
Frequency Count and Percentage Distribution of the Profile of the Respondents

Profile	Category	Frequency	Percentage
Age	15 - 19 years old	20	29.90%
	20 - 24 years old	47	70.10%
Sex	Female	27	40.30%
	Male	40	59.70%
Last Grade Level Attended	No Education at All	2	3.00%
	Grade 6	3	4.50%
	Grade 8	2	3.00%
	Grade 9	2	3.00%
	Grade 10	14	20.90%
	Grade 11	3	4.50%
	Grade 12	35	52.20%
	1st Year College	2	3.00%
	2nd Year College	4	6.00%
Type of Vocational Course Attended	Agriculture, Forestry, and Fishery	12	17.90%
	Automotive Servicing	1	1.49%
	Barista	1	1.49%
	Bread and Pastry Production	10	14.92%
	Caregiving	2	2.99%
	Carpentry	1	1.49%
	Construction, Painting, and Tile Setting	4	5.97%
	Cookery	3	4.48%
	Driving	2	2.99%
	Electrical and Electronics	3	4.48%
	Electronics and Electrical (ELM)	2	2.99%
	Garments (Dressmaking)	1	1.49%
	Hilot (Wellness Massage)	2	2.99%
	Human Health Care	3	4.48%
	Masonry	7	10.44%
	Metal and Engineering	1	1.49%
	Shielded Metal Arc Welding (SMAW)	13	19.40%
	Welding	1	1.49%
Parents Educational Attainment (Father)	Elementary Undergraduate	3	4.50%
	High School Undergraduate	14	20.90%
	College Undergraduate	1	1.50%
	Elementary Graduate	8	11.90%
	High School Graduate	36	53.70%
	College Graduate	5	7.50%
Parents Educational Attainment (Mother)	Elementary Undergraduate	8	11.90%
	High School Undergraduate	13	19.40%
	College Undergraduate	2	3.00%
	Elementary Graduate	3	4.50%
	High School Graduate	38	56.70%
	College Graduate	3	4.50%
Years as out-of-school youth	Less than 1 year	7	10.40 %
	1 - 2 years	29	43.30 %
	3 - 4 years	18	26.90 %
	5 years or more	13	19.40 %
Number of Technical/Vocational Training attended	1 program	64	95.50 %
	2 - 3 programs	3	4.50 %

Age. Most respondents (47 or 70.10%) were aged 20–24, while 20 respondents (29.90%) were aged 15–19. This distribution suggests that vocational training primarily caters to young adults who are actively seeking employment opportunities.

The highest percentage, 70.10 percent, highlights that individuals in their early twenties often transition from dependency to financial independence, making vocational education an essential pathway for employment. According to the Philippine Institute for Development Studies (PIDS, 2021), vocational education is crucial role in preparing young adults for workforce integration, ensuring they gain relevant skills needed for job stability. Conversely, the lowest percentage, 29.90 percent, reflects early engagement in vocational training among youth who may seek alternatives to formal education. Cedefop (2022) emphasizes that vocational programs help bridge the skill gap for younger individuals, reducing their likelihood of long-term unemployment.

Sex. Among the 67 respondents, 40 were male (59.70%) and 27 were female (40.30%). The higher male participation rate suggests that vocational training, particularly in technical fields like construction, welding, and masonry, is more popular among men.

According to the European Training Foundation (ETF, 2022), gender-inclusive vocational training empowers women by providpractical skills that enhance employability and career independence.

Last Grade Level Attended. Of the 67 respondents, the majority (35 or 52.20%) completed Grade 12. This was followed by 14 individuals (20.90%) who completed Grade 10. Four respondents (6.00%) attended 2nd Year College. Smaller portions completed Grade 6 and Grade 11, with 3 individuals (4.50%) each. Meanwhile, Grade 8, Grade 9, 1st Year College, and those with no formal education each accounted for 2 individuals (3.00%). Research by Asian Development Bank (ADB, 2021) notes that financial and socioeconomic constraints often prevent youth from enrolling, making vocational programs an accessible employment pathway.

Type of Vocational Course Attended. The results show that the highest number of respondents attended masonry training, with a frequency of 7, accounting for 10.44 percent of the total. This result shows by agriculture, forestry, and fishery courses, with 12 participants, making up 17.90 percent. Construction, painting, and tile setting, along with electronics and electrical, were attended by 4 respondents, representing 5.97 percent. Human health care had 3 participants, equivalent to 4.48 percent. Caregiving and driving courses were each chosen by 2 respondents, comprising 2.99 percent. Bread and pastry production and carpentry had 2 participants, totaling 22.40 percent. Cookery and garments (dressmaking) were also attended by 2 respondents, equating to 7.50 percent. Shielded metal arc welding and hilot wellness massage each had 2 participants, accounting for 4.50 percent. Electrical and electronics, as well as welding, each recorded a frequency of one, or 4.30 percent. Lastly, barista and automotive servicing had the lowest attendance, with one participant each, representing 1.50 percent.

The dominance of masonry and agricultural courses shows a strong regional focus on construction and food production as primary sources of livelihood in

Lingayen, Pangasinan. This trend supports global findings that trade-based skills offer stable employment, particularly for those entering the workforce without a college degree. According to the International Labour Organization (ILO, 2021), skilled trades in infrastructure, agriculture, and technical fields present reliable economic opportunities, particularly in developing economies where vocational pathways are essential.

Vocational training also offers a gateway to self-employment and entrepreneurship. This is evident among respondents who took up bread and pastry production, which accounted for 22.40 percent of the sample. The Organization for Economic Co-operation and Development (OECD, 2021) highlights that small food enterprises are among the most successful types of microenterprises globally, as they demand low startup capital while meeting consistent market needs in urban and rural communities. Moreover, 4.50 percent of respondents completed shielded metal arc welding courses, enabling them to pursue employment in industrial sectors or launch fabrication businesses in automotive and construction services.

The 25.40% of respondents chose caregiving reflects the growing demand for healthcare services both locally and internationally. This aligns with reports from the World Health Organization (WHO, 2022), which emphasize that the global aging population and expanding healthcare systems have led to a higher need for trained caregivers, particularly in countries like Japan, Canada, and those in the Middle East. Vocational caregiving courses equip individuals with certified competencies, enhancing their employability in domestic and overseas healthcare sectors.

Parents Educational Attainment: Father. The data reveal that most of the respondents' fathers, accounting for 36 individuals or 53.70 percent, were high school graduates. Next are 14 individuals, or 20.90 percent, who reached high school level but did not graduate. A total of 8 individuals, representing 11.90 percent, completed elementary education. Five individuals, equivalent to 7.50 percent, were college graduates. The data further show that 3 individuals, or 4.50 percent, had reached the elementary undergraduate level. The lowest proportion is recorded among those who attained college undergraduate status, with only 1 individual or 1.50 percent. This distribution shows that many of the respondents' fathers did not advance to higher education, which may reflect socioeconomic limitations, lack of access to educational opportunities, or early labor force participation driven by financial necessity.

According to UNESCO (2021), emphasizes that children from households where parents have limited formal education are more likely to experience economic disadvantages. Such conditions often lead to earlier entry into the workforce or a preference for vocational and skills-based training over formal academic qualifications. The low number of college-educated fathers in the data highlights ongoing systemic barriers to higher education in specific regions. Furthermore, the presence of a notable number of respondents' fathers who attained only elementary education supports the World Bank's (2020) analysis that lower parental educational attainment is closely associated with increased reliance on alternative learning pathways, particularly those focused on technical and vocational competencies. These alternative routes often offer quicker access to employment, and economically constrained households may prioritize them over long-term academic engagement.

Parents Educational Attainment: Mother. A significant proportion of mothers—specifically 38 out of 67, or 56.70 percent—were high school graduates, making it the most common educational attainment among the respondents' mothers. Thirteen mothers, or 19.40 percent, completed only up to high school level without graduating. Eight mothers, equivalent to 11.90 percent, were elementary undergraduates. A smaller portion of respondents' mothers—three each, or 4.50 percent—were either elementary graduates or college graduates. Lastly, only two mothers, or 3.00 percent, reached college level without graduating. The data reflect that most mothers can complete secondary education, while only a few pursued or completed higher education.

According to the United Nations Development Programme (UNDP, 2022), mothers with higher educational backgrounds promote structured educational paths for their children, including technical and vocational trainingHowever, the low proportion of mothers obtaining college degrees suggests that economic limitations and family responsibilities often hinder access to higher education, especially in rural and low-income settings. The International Labour Organization (ILO, 2021) supports this observation, emphasizing that in economically constrained households, women frequently prioritize immediate family support over long-term educational advancement, contributing to the predominance of high school-level attainment among mothers.

Years as Out-of-school Youth. The findings show that the largest group of respondents—29 individuals or 43.30%—were out of school for one to two years before enrolling in vocational training. This was followed by 18 individuals, or 26.90%, who had been out of school for three to four years. Thirteen individuals, representing 19.40%, reported being out of formal education for five

years, while the smallest group comprised seven individuals, or 10.40%, who had spent less than one year outside the school system. The data suggests that many out-of-school youth pursue vocational pathways within a relatively short period after leaving formal education. However, the significant share who remained out of school for three years or longer implies the presence of enduring barriers to employment or re-engagement with educational opportunities.

The International Labour Organization (2021) supports these patterns, which notes that youth who experience extended periods outside the formal education system often face increased difficulty in reintegrating into structured learning or employment pathways. Extended absence from education contributes to limited skill acquisition, long-term unemployment, and economic vulnerability. In particular, those out of school for five years or more face heightened risks of exclusion from the labor market. This reinforcers the critical role of accessible and timely vocational training as a mechanism for workforce reintegration.

Number of Technical/Vocational Training Attended. The data reveal that the overwhelming majority of respondents, comprising 64 individuals or 95.50 percent, participated in only one vocational or technical training program. In contrast, only 3 individuals, accounting for 4.50 percent, had enrolled in two to three vocational training programs. This trend reflects a preference among out-of-school youth for acquiring targeted, specialized training that enables rapid entry into the workforce rather than pursuing multiple training programs that may require additional time and resources.

This finding aligns with research by the Organisation for Economic Co-operation and Development (2021), highlighting that single-course vocational training often designed for immediate industry placement. Individuals who follow this path typically focus on acquiring job-specific competencies that match current labor market demands. Meanwhile, those who pursue multiple training programs develop a broader set of interdisciplinary skills that allow for greater career flexibility, the potential for advancement into higher-paying roles, or transitions across different sectors over time.

II. Effectiveness of Technical-Vocational Programs on Job Opportunities

The second part discusses the level of effectiveness of the vocational training programs in enhancing the job opportunities of the respondents. The data gathered categorized according to the relevance of the training to employment opportunities, the level of confidence and readiness for employment, the practical application and hands-on experience provided by the training, and the respondents' awareness of available job opportunities and career pathways

Table 2
Relevance of Training to Employment Opportunities

	WM	DE
1. The skills I acquired from training are aligned with job requirements.	4.30	HE
2. The training program provided increased my knowledge and experience.	4.28	HE
3. The training increased my ability to perform job-related tasks effectively.	4.27	HE
4. The program helped me in developing both practical work (like operating tools and machines) and personal skills (like teamwork, communication, and discipline)	4.25	HE
5. The technical-vocational training provided me with essential skills needed in the workplace.	4.18	HE
Weighted Mean	**4.25**	**HE**

Note: DE (Descriptive Equivalent) WM (Weighted Mean)
Legend: 1.00 – 1.50 (NE – Not Effective) 1.51 – 2.50 (FE – Fairly Effective)
2.51 – 3.50 (ME – Moderately Effective) 3.51 – 4.50 (HE – Highly Effective)
4.51 – 5.00 (VHE – Very Highly Effective)

Relevance of Training to Employment Opportunities. The data from Table 2 indicate that the indicator "The skills I acquired from training are aligned with job requirements." had the highest mean of 4.30. The indicator "The technical-vocational training provided me with essential skills needed in the workplace" received the lowest mean score of 4.18. Overall, the weighted mean score across all indicators is 4.25, indicating that respondents perceived the effectiveness of technical-vocational training programs on job opportunities, specifically regarding relevance of training to employment opportunities, to be highly effective.

Among the five statements evaluated, the highest rating was given to "The skills I acquired from training are aligned with job requirements." with a WM of 4.30, interpreted as Highly Effective (HE). This suggests that the participants found the training programs well-structured and closely matched with the competencies required in the labor market. This finding is supported by Afeti and Adubra (2018), who emphasized in their study that aligning technical and vocational training with actual labor market needs enhances job readiness and employment outcomes. They argued that when training is responsive to market demands, it significantly contributes to youth employability and economic productivity.

Conversely, the statement "The technical-vocational training provided me with essential skills needed in the workplace" received the lowest rating, with a mean score of 4.18, though still interpreted as Highly Effective (HE). Despite being favorable, the respondents gave the

training lower score, the training program may not have fully addressed some essential workplace skills.. Akoojee, Gewer, and McGrath (2015) highlighted this concern in their comparative study of vocational education in Southern Africa. While technical training often provides a strong theoretical and practical foundation, gaps may remain in soft skills, adaptability, and workplace integration—critical components for success in real-world employment settings.

Table 3
Confidence and Readiness for Employment

	WM	DE
1. The training equipped me with proper work, ethics, and discipline needed in employment.	4.25	HE
2. The program helped me develop the skills necessary for a work setting.	4.22	HE
3. The training program improved my confidence in applying for work opportunities.	4.15	HE
4. The program enhanced my problem-solving and decision-making skills in a workplace	4.13	HE
5. The training increased my ability to adapt to different work environments.	4.10	HE
Weighted Mean	**4.17**	**HE**

Note: DE (Descriptive Equivalent) WM (Weighted Mean)
Legend: 1.00 – 1.50 (NE – Not Effective) 1.51 – 2.50 (FE – Fairly Effective)
2.51 – 3.50 (ME – Moderately Effective) 3.51 – 4.50 (HE – Highly Effective)
4.51 – 5.00 (VHE – Very Highly Effective)

Confidence and Readiness for Employment. The data from Table 3 indicate that the indicator "The training equipped me with proper work, ethics, and discipline needed in employment." garnered the highest mean of 4.25. The indicator "The training increased my ability to adapt to different work environments." Received the lowest mean of 4.10. Overall, the weighted mean score across all indicators is 4.17, indicating that respondents perceived the effectiveness of technical-vocational training on job opportunities, specifically regarding confidence and readiness for employment, to be highly effective.

The highest-rated item, "The training equipped me with proper work, ethics, and discipline needed in employment." received a weighted mean of 4.25. This result implies that the training program successfully instilled foundational work habits and values that are critical in professional settings. Robinson (2020), in his study on employability skills, emphasized the importance of ethics, discipline, and administrative preparedness as key elements employers seek in job candidates. These findings suggest that the training program aligns well with these essential expectations.

On the other hand, the lowest-rated item in this table, "The training increased my ability to adapt to different work environments." scored a weighted mean of 4.10. Although still categorized as "Highly Effective," this slightly lower rating suggests that adaptability, while addressed, may not have been as thoroughly developed as other aspects. Given its importance in dynamic work settings, Pulakos et al. (2019) suggest that training programs should explicitly reinforce adaptability as a core skill.

Table 4
Practical Application and Hands-on Experience

	WM	DE
1. The technical-vocational training gave me hands-on experience that applies to real work situations.	4.33	HE
2. The practical exercises helped me understand how to apply skills in job setting.	4.25	HE
3. The trainers made sure that I practiced the job skills I needed thoroughly.	4.21	HE
4. The training program gave me practical experience through simulations and work-based learning.	4.19	HE
5. The program allowed me to build technical skills that are directly useful for employment.	4.04	HE
Weighted Mean	**4.20**	**HE**

Note: DE (Descriptive Equivalent) WM (Weighted Mean)
Legend: 1.00 – 1.50 (NE – Not Effective) 1.51 – 2.50 (FE – Fairly Effective)
2.51 – 3.50 (ME – Moderately Effective) 3.51 – 4.50 (HE – Highly Effective)
4.51 – 5.00 (VHE – Very Highly Effective)

Practical Application and Hands-on Experience. The data from Table 4 indicate that the indicator "The technical vocational training gave me hands-on experience that applies to real work situations." garnered the highest mean of 4.33. The indicator "The program allowed me to build technical skills that are directly useful for employment" received the lowest mean of 4.04. Overall, the weighted mean score across all indicators is 4.20, indicating that respondents perceived the effectiveness of technical/vocational training on job opportunities, specifically regarding practical application and hands-on experiences, to be highly effective.

The highest weighted mean (WM) is 4.33, for the item: "The technical vocational training gave me hands-on experience applies to real work situations." This shows that participants strongly believe the training program effectively mirrors actual work environments, providing realistic and practical exposure. This finding aligns with the study of Billet (2016), which emphasized that work-based learning fosters authentic engagement and skill development through real-world tasks that are critical for workforce readiness.

On the other hand, the lowest WM is 4.04 (still rated as HE) for the statement: "The program allowed me to build technical skills that are directly useful for employment." Although the participants still strongly agree, this lower rating may suggest slight room for improvement in aligning technical skills with specific job market demands. This observation is supported by the study of Finch et al. (2015), which highlighted the potential mismatch between training outcomes and employer

expectations, stressing the need for vocational programs to continuously adapt curricula based on labor market trends.

Table 5
Awareness of Job Opportunities and Carer Pathway

	WM	DE
1. The support I received in career planning helped align my goals with my skills and interests.	4.24	HE
2. The training program gave me career orientation and taught me how to look for a job.	4.22	HE
3. The training helped me understand the available job opportunities related to what I learned.	4.12	HE
4. The program helped me learn about current job opportunities and growing industries related to my training.	4.12	HE
5. The program guided me in exploring different career pathways.	4.04	HE
Weighted Mean	**4.14**	**HE**

Note: DE (Descriptive Equivalent) WM (Weighted Mean)
Legend: 1.00 – 1.50 (NE – Not Effective) 1.51 – 2.50 (FE – Fairly Effective)
2.51 – 3.50 (ME – Moderately Effective) 3.51 – 4.50 (HE – Highly Effective)
4.51 – 5.00 (VHE – Very Highly Effective)

Awareness of Job Opportunities and Career Pathway. The data from Table 5 indicate that the indicator "The support I received in career planning helped align my goals with my skills and interests." garnered the highest mean of 4.24. The indicator "The program guided me in exploring different career pathways" received the lowest mean of 4.04. Overall, the weighted mean score across all indicators is 4.14, indicating that respondents perceived the effectiveness of technical-vocational training on job opportunities, specifically regarding awareness of job opportunities and career pathways, to be highly effective.

The highest-rated item, "The support I received in career planning helped match my goals with my skills and interests." scored a 4.24 weighted mean. This finding highlights the effectiveness of personalized career guidance in helping trainees make informed decisions about their career trajectories. Super's Life-Span, Life-Space Theory (1990) supports this result by stressing the significance of aligning individual skills and interests with career goals to ensure long-term job satisfaction.

Meanwhile, the lowest-rated item, "The program guided me in exploring different career pathways." which had a weighted mean of 4.04. Though still interpreted as "Highly Effective," this lower score may suggest limited exposure to diverse career options. This observation aligns with the Social Cognitive Career Theory proposed by Lent, Brown, and Hackett (1994), which underscores the importance of career exploration in building career self-efficacy and informed decision-making.

III. Challenges Encountered in Participating in Vocational Training Programs

This section highlights the challenges faced by out-of-school youth in joining vocational training programs conducted by TVET providers. This study groups the challenges into three categories: access to information about training programs, financial barriers that hinder participation, and personal and social challenges experienced by the respondents.

Table 6
Access to Information

	WM	DE
1. The enrollment process was unclear and difficult to navigate.	2.04	SC
2. I was not informed about job opportunities available after completing the training.	2.03	SC
3. I had difficulty finding information about available technical-vocational training programs.	1.94	SC
4. I did not receive sufficient guidance or orientation before starting the program.	1.93	SC
5. There was a lack of communication about important schedules, requirements, or updates regarding the program.	1.87	SC
Weighted Mean	**1.96**	**SC**

Note: DE (Descriptive Equivalent) WM (Weighted Mean)
Legend: 1.00 – 1.50 (NCA – Not Challenging at All) 1.51 – 2.50 (SC – Slightly Challenging) 2.51 – 3.50 (MC – Moderately Challenging) 3.51 – 4.50 (VC – Very Challenging) 4.51 – 5.00 (EC – Extremely Challenging)

Access to Information. The data from Table 6 indicate that the indicator "The enrollment process was unclear and difficult to navigate" garnered the highest mean of 2.04. The indicator "There was a lack of communication about important schedules, requirements, or updates regarding the program" received the lowest mean of 1.87. Overall, the weighted mean score across all indicators is 1.96, indicating that the respondents find access to information to be slightly challenging.

These findings support Amankwah-Amoah's (2015) argument that complicated enrollment processes and lack of guidance are significant deterrents to vocational training access. The high mean score for the indicator 'The enrollment process was unclear and difficult to navigate' suggests that most out-of-school youth experienced confusion during enrollment. This confirms that complicated procedures deter participation, particularly for marginalized groups.

Conversely, "There was a lack of communication about important schedules, requirements, or updates regarding the program." had the lowest mean weighted average in this category. According to Mupa and Chinooneka (2015), effective communication plays a vital role in the success of training program engagement. Although this measure received the lowest mean score, it

still reflects some difficulty, suggesting that communication should be improved to enhance participants' experiences..

Table 7
Financial Barriers

	WM	DE
1. Transportation cost made it difficult for me to attend the training sessions.	2.58	SC
2. I had to prioritized earning money over attending training because of financial concerns.	2.42	SC
3. I lack financial support such as scholarships or stipends to complete the training.	2.25	SC
4. The cost of materials, tools, or uniforms was a burden on me.	2.16	SC
5. The cost of certification or assessment was an obstacle to participation.	2.00	SC
Weighted Mean	**2.28**	**SC**

Note: DE (Descriptive Equivalent) WM (Weighted Mean)
Legend: 1.00 – 1.50 (NCA – Not Challenging at All) 1.51 – 2.50 (SC – Slightly Challenging) 2.51 – 3.50 (MC – Moderately Challenging) 3.51 – 4.50 (VC – Very Challenging) 4.51 – 5.00 (EC – Extremely Challenging)

Financial Barriers. The data from Table 7 indicate that the indicator "Transportation costs made it difficult for me to attend the training sessions." received the highest mean of 2.58. The indicator "The cost of certification or assessment was an obstacle to my participation" received the lowest mean of 2.00. Overall, the weighted mean score across all indicators is 2.28, indicating that the respondents find financial barriers to be slightly challenging.

These findings align with the study of Maknun, Johar and Marwiah M. (2022)., which underscored that transport costs are one of the primary obstacles for poor learners, especially in rural regions. Adolescents from far-flung places have extra transport costs, and thus it becomes challenging for them to attend training sessions. This suggests the need to tackle transport assistance to improve technical-vocational training access.

Meanwhile, the statement 'The cost of certification or assessment was an obstacle to my participation' received the lowest average weighted mean among the financial barriers. Santos (2021) says some technical-vocational schools provide discounted or subsidized costs for certification, thus making this cost more affordable for learners. Although it ranks lowest among these financial barriers, it is still considered costly for specific participants.

In addition, in the research done by the Philippine Institute for Development Studies (PIDS), financial limitations, such as tuition fees, transportation fares, and other miscellaneous charges, were found to be significant obstacles hindering Filipino youth from undergoing technical-vocational training (PIDS, 2021).

Table 8
Personal and Social Challenges

	WM	DE
1. My family responsibilities such as taking care of siblings or elders made it difficult for regularly attend training sessions.	2.58	SC
2. I lacked emotional and financial support from my parents or family members in pursuing vocational training.	2.45	SC
3. I had limited access to a support system such as friends, or mentors to guide me to the training process.	2.33	SC
4. There were negative perceptions or discouragements from my community or social circle regarding vocational training.	2.18	SC
5. Help problems physically and mentally limited my ability to attend or finish the training program.	2.00	SC
Weighted Mean	**2.38**	**SC**

Note: DE (Descriptive Equivalent) WM (Weighted Mean)
Legend: 1.00 – 1.50 (NCA – Not Challenging at All) 1.51 – 2.50 (SC – Slightly Challenging) 2.51 – 3.50 (MC – Moderately Challenging) 3.51 – 4.50 (VC – Very Challenging) 4.51 – 5.00 (EC – Extremely Challenging)

Personal and Social Challenges. The data from Table 8 indicate that the indicator “My family responsibilities such as taking care of siblings or elders made it difficult to regularly attend training sessions.” garnered the highest mean of 2.58. The indicator “Health problems physically or mentally limited my ability to attend or finish the training program.” Received the lowest mean of 2.00. Overall, the weighted mean score across all indicators is 2.38, indicating that the respondents find personal and social challenges to be slightly challenging.

These findings support the assertion of Albert et al. (2020) from the Philippine Institute for Development Studies (PIDS), who determined that housework or caregiving responsibilities are significant hindrances to Filipino young people who are NEET in taking up technical and vocational education and training (TVET). The large mean score for the measure “My family responsibilities like taking care of elders or siblings hindered me from attending training sessions regularly.” shows that most out-of-school youth have competing responsibilities at home that prevent them from attending training sessions consistently.

Conversely, “Health problems physically or mentally limited my ability to attend or complete the training program.” had the lowest average weighted mean in this category. Although health factors are present, they are considerably less severe compared to family commitment and absence of support. This shows that working on familiar responsibilities can have a more substantial impact on enhancing participation levels in technical-vocational training schemes.

IV. Relationship Between Demographic Profile and Perceived Effectiveness of Vocational Training

The fourth part of the study presents the analysis on whether there is a significant relationship between the respondents' demographic profile and the perceived effectiveness of vocational training programs on their job opportunities. Statistical treatment was used to determine the correlation between variables.

Table 9
Relationship between the Demographic Profiles of Out-of-School and the Perceived Effectiveness of Vocational Training Programs on their Job Opportunities

Profile	Relevance of Training to Employment Opportunities		Confidence and Readiness for Employment		Practical Application and Hands-on Experience		Awareness of Job Opportunities and Career Pathway	
	r	Sig.	r	Sig.	r	Sig.	r	Sig.
Age	.400**	.001	.315**	.009	.458**	.000	.297*	.015
Sex	.136	.272	-.097	.433	.016	.895	-.008	.950
Last Grade Level Attended	-.058	640	-.190	.123	-.078	.529	-.250*	.041
Type of vocational course attended	-.258*	.035	-.278*	.023	-.144	.243	-.221	.073
Parents Educational Attainment (Father)	.021	.866	.102	.413	.303	.013	.147	.234
Parents Educational Attainment (Mother)	.087	.481	.104	.401	.340**	.005	.267*	.029
Years as Out-of-School Youth	.016	.897	.088	.480	-.022	.857	.020	.874
Number of Vocational Training Attended	.137	.270	.160	.196	.201	102	.175	.156

Table 9 shows the significant relationships between the respondents' demographic profiles and the perceived effectiveness of vocational training programs on their job opportunities, based on the Pearson Chi-Square test of association.

Firstly, age exhibits a significant relationship across all four indicators of training effectiveness: relevance to employment opportunities ($p = 0.001$), confidence and readiness for employment ($p = 0.009$), practical application and hands-on experience ($p = 0.000$), and awareness of job opportunities and career pathways ($p = 0.015$). This suggests that as respondents grow older, their appreciation and perception of vocational training outcomes improve. Older participants tend to be more career-focused and have a better understanding of labor market demands, which makes them more engaged and receptive to training.. According to a study by Gines (2015), older out-of-school youth participate more actively in skills development initiatives due to their increased awareness of the importance of employability and financial independence. This reflects maturity and life experience, which influence their attitude toward education and skill-building opportunities.

On the other hand, sex does not show a significant relationship with any of the training effectiveness indicators. The p-values for all four aspects—relevance ($p = 0.272$), confidence ($p = 0.433$), practical experience ($p = 0.895$), and awareness ($p = 0.950$)—are all above the 0.05 threshold. This shows that vocational training programs are perceived similarly by male and female participants. Thus, gender does not appear to be a determining factor in how effective these programs are perceived to be, which is promising regarding inclusivity and gender equality in access to vocational training benefits.

Meanwhile, the last grade level attended does not significantly affect perceptions of training relevance ($p = 0.640$), confidence ($p = 0.123$), or hands-on experience ($p = 0.529$). However, it does show a significant relationship with awareness of job opportunities and career pathways ($p = 0.041$). This suggests that participants who reached higher grade levels before dropping out will likely have been exposed to career orientation sessions, job fairs, or guidance counseling in school, which can raise their awareness of employment options. This implies that even brief exposure to formal education can impact a youth's awareness of job paths, giving those with higher grade levels an advantage in understanding career trajectories.

Furthermore, the type of vocational course attended demonstrates a significant relationship with training relevance ($p = 0.035$) and confidence and readiness for employment ($p = 0.023$). Interestingly, both relationships are negative, indicating that some types of vocational training may be perceived as less effective or relevant to actual job prospects. For instance, courses not aligned with local labor market demands or that lack practical application may not instill the same level of confidence or sense of preparedness among trainees. This finding aligns with Torres (2017), who emphasized that training programs must be directly tailored to industry needs and local economic contexts to have a meaningful impact. When training mismatches occur, youth may feel that they did not make good use of their time or that they still lack the confidence to enter the workforce.

In addition, parents' educational attainment presents mixed results. The father's education level has no significant association with any of the training effectiveness dimensions. However, the mother's educational attainment shows a significant relationship with practical application and hands-on experience ($p = 0.005$)

and with awareness of job opportunities (p = 0.029). These findings highlight the critical influence of mothers in the educational and developmental pathways of youth. Mothers with higher educational attainment may place greater importance on learning and skill development, encourage their children to participate actively in training programs, and support them in exploring job opportunities. This maternal influence creates a nurturing environment that enhances the perceived effectiveness of training, especially in areas requiring motivation and planning.

Moreover, the number of years as out-of-school youth does not show a significant relationship with any of the outcome indicators. All p-values are well above the 0.05 threshold, suggesting that the length of time youth spent out of formal schooling does not strongly influence how they perceive the benefits of vocational training. This may suggest that once individuals participate in a training program, the length of their schooling gap becomes less relevant than their current experience in the program.

Lastly, the number of vocational training programs attended does not significantly affect any of the perceived outcomes. The non-significant p-values suggest that attending multiple programs does not automatically lead to improved perceptions of training effectiveness. This can be due to the redundancy of content across programs or varying levels of program quality. It emphasizes that quality and relevance matter more than quantity, and repeated participation in similar training might not add value without diversified content or targeted learning objectives.

PROPOSED INTERVENTION PLAN FOR BRIDGING OPPORTUNITIES: A COMMUNITY ENGAGEMENT CAMPAIGN FOR OUT-OF-SCHOOL YOUTH EMPOWERMENT

I. Rationale

Youth empowerment is a fundamental aspect of sustainable community development. For out-of-school youth (OSY), access to quality education, skills training, and livelihood opportunities is crucial for their personal growth and future success. However, many OSY in Lingayen, Pangasinan, face significant challenges that prevent them from participating in vocational training programs.

Out-of-school youth (OSY) in Lingayen, Pangasinan face significant challenges that limit their access to vocational training and employment opportunities. A recent study revealed that the most pressing issues for OSY include unclear enrollment processes, financial barriers such as transportation costs, and personal responsibilities that prevent consistent participation in training programs. These challenges hinder their ability to gain essential skills and secure stable livelihoods.

This proposed intervention program, "Bridging Opportunities: A Community Engagement Campaign for Out-of-School Youth Empowerment," is designed to directly address these barriers. By providing clear information on training, offering financial support, and creating flexible learning environments, this program aims to empower OSY, helping them build essential skills, improve their employability, and achieve personal and professional growth.

II. General Objectives

a. To increase awareness and understanding of technical and vocational training opportunities among out-of-school youth.
b. To provide financial assistance and support mechanisms to reduce the economic burden of OSY in accessing training programs.
c. To offer flexible training options and personal support to accommodate the unique circumstances of OSY, ensuring consistent participation and skill development.

Areas of Improvement	Objectives	Activities	Persons Involved	Time Frame
Limited Participation of OSY due to Unclear Enrollment Process	To provide clear and accessible information on available training programs..	Conduct information sessions. Develop an online information portal. Collaborate with local leaders for community-based information drives	Youth leaders, Local Government Unit, volunteers	All year round
Financial Constraints Limiting Participation	To minimize the financial burden of OSY in accessing training	Secure sponsorships for transportation support Provide financial aid for training fees Partner with local businesses for scholarship programs	Community leaders, local businesses, youth organizations	All year round
Limited Participation due to Personal Responsibilities	To offer flexible training options and support mechanisms	Provide modular or online training options Offer time management and self-care workshops Organize peer support groups	Trainers, youth mentors, local government units	All year round

CONCLUSION AND RECOMMENDATIONS

Considering the preceding findings of the study, this research concludes the following:

1. The majority of the respondents are aged 20 to 24 years old, with more males than females. Most of them have completed Grade 12 as their highest educational attainment. Shielded Metal Arc Welding (SMAW) training is the most commonly attended vocational course. Most of respondents' fathers and mothers are high school graduates. Most of them spent one to two years as out-of-school youth and have only attended one vocational or technical training program.
2. The indicators in the Level of Effectiveness of Vocational Training Programs on the Job Opportunities of Out-of-School Youth, such as Relevance of Training to Employment Opportunities, Confidence and Readiness for Employment, Practical Application and Hands-on Experience, and Awareness of Job Opportunities and Career Pathway, are perceived by the respondents as highly effective, as manifested by the overall weighted mean of 4.19.
3. The indicators in the Challenges Encountered by Out-of-School Youth in Participating in Technical/Vocational Training Programs, such as Access to Information, Financial Barriers, and Personal and Social Challenges, are perceived by the respondents as slightly challenging, as manifested by the overall weighted mean of 2.24
4. There is a statistically significant relationship between age and all aspects of training effectiveness, including relevance to employment opportunities, confidence and readiness, practical application, and awareness of job opportunities. However, there is no statistically significant relationship between sex and any aspect of training effectiveness. Additionally, there is an important relationship between the last grade level attended and awareness of job opportunities. The type of vocational course attended significantly affects perceptions of training relevance and confidence. Parents' educational attainment also shows an important relationship, with fathers' education affecting practical skills and mothers' education influencing practical skills and awareness of job opportunities. In contrast, there is no statistically significant relationship between years as out-of-school youth and the number of vocational training attended with any aspect of training effectiveness.

Considering the preceding findings of the study, the researchers propose the following recommendations :

1. Training programs may tailor to the specific characteristics of out-of-school youth. Courses may be age-appropriate, skill-level aligned, and inclusive. Those with lower educational attainment or longer years out of school may benefit from foundational or bridging programs. The program may actively promote gender-sensitive approaches to ensure equal participation across both traditional and non-traditional fields.
2. Vocational courses may continually be updated based on current industry demands. Training institutions could pursue stronger partnerships with local businesses, DOLE, and industry experts to align skills training with employment opportunities. Training institutions could strengthen practical components like on-the-job training and internships to enhance job readiness.
3. Stakeholders may address information gaps about available programs, enrollment procedures, and job pathways by improving communication systems. LGUs and training centers could create accessible, youth-friendly platforms (e.g., online portals, barangay announcements, mobile alerts) to keep out-of-school youth informed. Training providers could integrate regular orientation and career counseling before and after training to support informed decision-making and better employment preparation. Significant correlations between factors such as age and mother's educational attainment and training effectiveness suggest that demographic data can guide program enhancements.
4. Significant correlations between and among profile variables could be considered as factors when planning and evaluating programs to provide targeted support such as mentoring, soft skills training, and differentiated instruction especially for youth with limited family or educational support.
5. It recommends that a holistic and sustainable intervention plan be adopted to address these barriers directly by out-of-school youth. This may include continuous information dissemination, collaboration with community leaders and organizations, provision of financial and logistical support, and the implementation of flexible training programs.

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